

## **Technical Notes/Data Limitations**

### **Suicide Mortality Rates**

Data for suicide mortality rates were obtained through the Center for Disease Control and Prevention's WISQARS website: <http://www.cdc.gov/ncipc/wisqars/>. Deaths with an underlying cause of death coded as suicide (E950-E959 and X60-X84, Y878.0 in 1999-2003) were selected.

When considering suicide related deaths using death certificates, it is important to note that death certificates not completed by April 30<sup>th</sup> of the following year are not included in the electronic records of National Center for Health Statistics (NCHS). April 30<sup>th</sup> is the close-out date for reporting deaths to the NCHS. Any death data finalized after this date are not added to the electronic record. Roughly 300 deaths per year (out of a total of 12,000-13,000 deaths) are not included in the electronic record because the cause remains undetermined. Although this rate, roughly 2.5 percent, is relatively low, it is likely that suicides will comprise one of the larger causes missed through this mechanism since suicides are more likely than many other causes to go through a longer review process and be labeled undetermined for a longer period of time.

In addition, it is possible that at least some deaths labeled accidents were in fact suicides. Suicides misclassified as accidents could include, for example, single vehicle crashes, poisoning, drowning, and overdoses.

### **Self-Inflicted Injuries Resulting in Hospitalization**

Hospitalization data capture the population whose injuries are serious enough to merit admission to hospital. Missing from our current surveillance system is an accounting of self-inflicted injuries that did not result in a hospitalization. The MHDO recently began to collect and distribute outpatient data, which will be a valuable addition to suicide surveillance.

The rate of E-coding injury hospitalizations in Maine hospitals is not 100 percent, which may produce underestimates of the true number of hospitalizations for self-inflicted injuries. In addition, E-coding practice may differ by hospital, which could result in a systematic bias in the E-coding rate or how E-codes are assigned for a given event.

### **Youth Risk Behavior Survey**

The YRBS survey cannot be used to examine geographical units smaller than the state, and so cannot be used for studying possible local level differences. In addition, the survey is based on youth self-report, which can be subject to biases including recall bias and social desirability bias.

The Youth Risk Behavior Survey (YRBS) is the only data source on suicide ideation and self-reported attempts. Of those who reported ever having attempted suicide, only a third reported having required medical attention for their injury. This is suicidal behavior that would go undetected using hospital discharge, emergency department, and emergency medical services data. In addition, the YRBS is the only data source that combines suicidal behavior data with other risk behaviors that may be associated with suicidal behavior. To this point, we have lacked data on suicide ideation for any population but youth. However, the MYSPP plans to add the YRBS questions to the Behavioral Risk Factor Surveillance System, a survey of Maine adults, in the future.